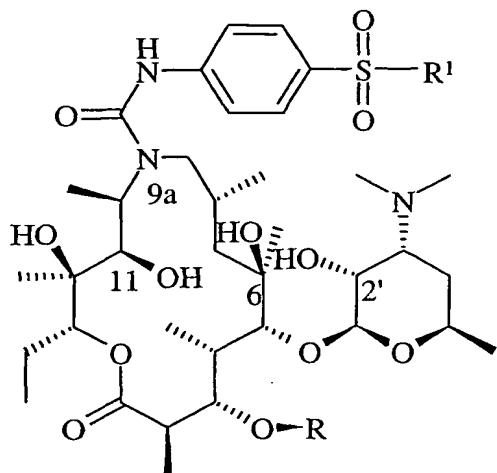


CLAIMS

400 1. Substituted 9a-N-{N'-[4-(sulfonyl)phenylcarbamoyl]} derivatives of 9-deoxo-9-dihydro-9a-aza-9a-homoerithromycin A and 5-O-desosamynil-9-deoxo-9-dihydro-9a-aza-9a-homoerithronolide A of the general formula 1,



1

wherein R represents H or cladinosyl moiety, and R¹ represents chloro, amino, phenylamino, 2-pyridylamino, 3,4-dimethyl-5-isoxazolylamino and 5-methyl-3-isoxazolylamino group, and pharmaceutically acceptable addition salts thereof with inorganic or organic acids.

410 2. A substance according to claim 1, characterized in that R^1 represents chloro group and R represents cladinosyl moiety.

3. A substance according to claim 1 characterized in that R^1 represents chloro group, and R represents H.

4. Substance according to claim 1 where R^1 represents amino group, and R represents cladinosyl moiety.

415 5. A substance according to claim 1, characterized in that R^1 represents phenylamino group, and R represents cladinosyl group.

6. A substance according to claim 1, characterized in that R^1 represents 2-pyridylamino group, and R represents cladinosyl group.

420 7. A substance according to claim 1, characterized in that R^1 represents 3,4-dimethyl-
-5-isoxazolyl group, and R represents cladinosyl moiety.

8. A substance according to claim 1, characterized in that R^1 represents 5-methyl-3-
-isoxazolylamino group, and R represents cladinosyl group.

9. A substance according to claim 1, characterized in that R^1 represents amino group
425 and R represents H.

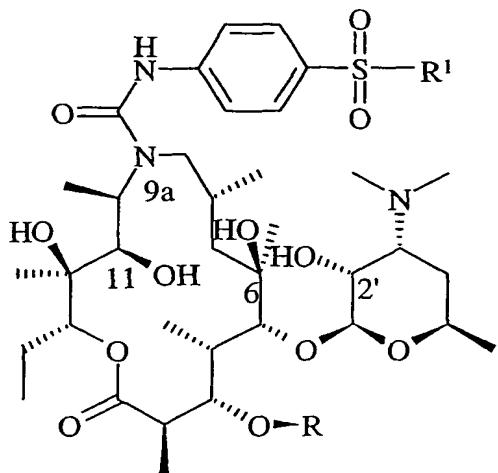
10. A substance according to claim 1, characterized in that R^1 represents phenylamino
group, and R represents H.

11. A substance according to claim 1, characterized in that R^1 represents 2-
-pyridylamino group, and R represents H.

430 12. A substance according to claim 1, characterized in that R^1 represents 3,4-dimethyl-
-5-isoxazolylamino group, and R represents H.

13. A substance according to claim 1, characterized in that R^1 represents 5-methyl-3-
-isoxazolylamino group and R represents H.

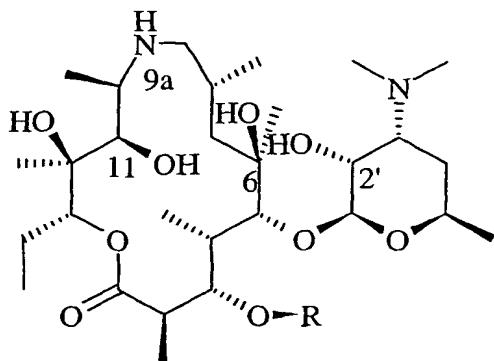
14. A process for the preparation of substituted 9a-N-{N'-[4-(sulfonyl)phenyl
435 carbamoyl]} derivatives of 9-deoxo-9-dihydro-9a-aza-9a-homoerithromycin A and
5-O-desosaminyl-9-deoxo-9-dihydro-9a-aza-9a-homoerithronolide A of the general
formula 1,



1

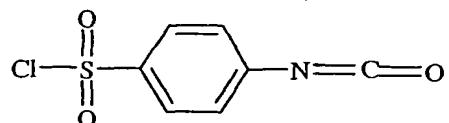
440 wherein R^1 represents chloro, amino, phenylamino, 2-pyridylamino, 3,4-dimethyl-5-
-isoxazolylamino and 5-methyl-3-isoxazolylamino group and R represents H or
cladinosyl group, characterized in that 9a-N-{N'-[4-(chlorosulfonyl)phenyl]-

445 carbamoyl} derivatives of 9-deoxo-9-dihydro-9a-aza-9a-homoerithromycin A and 5-O-desosaminyl-9-deoxo-9-dihydro-9a-aza-9a-homoerithronolide A general formula 1, wherein R¹ represents chloro group and R represent H or cladinosyl group, which can be prepared by reaction of 9-deoxo-9-dihydro-9a-aza-9a-homoerythromycin A or 5-O-desosaminyl-9-deoxo-9-dihydro-9a-aza-9a-homoerithronolide A general formula 2



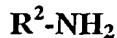
2

450 wherein R represents H or cladinosyl group with 4-(chlorosulfonyl)phenyl isocyanate formula 3,



3

455 are subjected to a reaction with ammonia or amine of general formula 4,



4

460 wherein R² represents H or phenyl, 2-pyridyl, 3,4-dimethyl-5-isoxazolyl or 5-methyl-3-isoxazolyl group, in toluene, xylene or some other aprotic solvent, at a temperature 0-110°C and then, if appropriate, to a reaction with inorganic or organic acids.

15. Pharmaceutical composition comprising a pharmaceutically acceptable carrier and an antibacterially effective amount of the substances according to claim 1.

465 16. A use of a substance of according to any claims 1-13 for preparing compositions for sterilization rooms and medical instruments as well as for protection of wall and wooden coatings.